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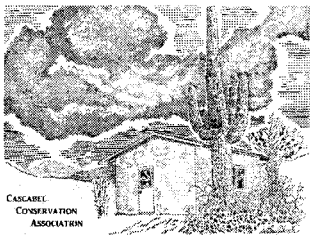

CASCABEL CONSERVATION ASSOCIATION

SUPPORTING CONSERVATION, COMMUNITY AND CONTEMPLATION IN THE MIDDLE SAN PEDRO RIVER VALLEY

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October 5, 2015

Arizona Power Plant and Transmission Line Siting Committee
Arizona Corporation Commission
1200 W. Washington
Phoenix, AZ 85007-2996

To the Arizona Power Plant and Transmission Line Siting Committee and Corporation Commission,

The Cascabel Conservation Association (CCA) is a community-based conservation organization dedicated to the collaborative stewardship of the middle San Pedro River watershed by promoting the health, stability, and diversity of vegetation, waters, and wildlife as well as supporting a sustainable human community. I serve as Conservation Director for the organization, which has over 150 members concerned with the conservation of this area, as well as the broader watershed. Since its founding in 1997, our organization has had a long successful history in regards to achievements in collaborative conservation, land protection, advocacy, environmental education, providing desert sojourning, and community events. To date, we have protected over 1900 acres of land through fee title acquisition and facilitating conservation easements in the Cascabel area of the San Pedro valley.

I am writing you regarding our position against the proposed SunZia transmission line in Arizona, and specifically its route through the middle/lower San Pedro valley. I have worked as a conservation biologist in the (broader) lower San Pedro valley, between Benson and Winkelman, Arizona, from 2002 to present (14 years). Additionally, I completed a master's of science research project through the Desert Southwest Cooperative Ecosystem Studies Unit at the University of Arizona, 2013-2014. My research focused on the ecological and cultural values of this lower watershed. I conducted an ecosystem conservation assessment and provided a landscape conservation design for the watershed (thesis submitted/accepted August 2014). My research was supported by the U.S. Fish and Wildlife Service, Desert Landscape Conservation Cooperative. From this background, and now as Conservation Director for CCA, I have a thorough knowledge of this watershed's natural resource values, ecosystem processes, agency and non-governmental organization conservation efforts, and community concerns and investment.

The lower San Pedro Valley is a rare, mostly ecologically intact valley, the only one in southern Arizona without a major transportation artery or large-scale transmission corridor (notably the least developed, highest landscape integrity section is the region north of Benson to San Manuel where SunZia line siting is proposed). Hence, the valley still supports large wildlife that traverse the

valley, such as black bear, mountain lion, white-tailed deer, mule deer, and big horn sheep (sheep populations are both in the Catalina and Galiuro Mountains), as well as other medium size species, such as gray fox, coati, and javelina, and rare reptile species, such as the Sonoran desert tortoise. Larger raptors also traverse the valley in their foraging, including golden eagle, Swainson's hawk, zone-tailed hawk, red-tailed hawk, Harris's hawk, gray hawk, common black-hawk, and other migrants.

The proposed two single-circuit 500 kV transmission lines at 135 feet height and designated 400-1000 foot "vegetation-managed" rights-of-way will significantly damage the landscape connectivity capacity for many of these species. The alignment corridor will inevitably be lessened of its vegetation density and height, and diversity (as seen from other transmission lines projects throughout Arizona). Access roads will be needed for construction of the lines and for maintenance thereafter. These roads will bring unauthorized vehicles of all types into previously remote wilderness quality backcountry of the Rincon and Catalina Mountain foothills, canyons, and slopes. These access and alignment roads will result in a new entry area for erosion of silt and coarse materials and downslope deposition into the San Pedro River basin. The vehicles that traverse these roads will potentially introduce non-native invasive plant species (e.g. buffelgrass), which has compromised the native biological richness of the Sonoran desert throughout this region (through non-native plant competition) and, in the case of buffelgrass, has raised the risk for catastrophic high intensity/high temperature unnatural wildfire (or human-caused fire, directly or indirectly). Additionally, these roads will increase the potential for unauthorized use by all-terrain vehicles (i.e., OHVs), and raise the risk for wildlife poaching (see AZ Daily Star 10/1/15, p. A6), as well as looting of previously unreachable archaeological and historical sites for which the valley is well known for harboring.

At least five major wildlife corridors for dispersing animals likely occur in the cross-valley landscape linkages provided by paired canyon/wash systems within this lower watershed. These landscape linkages will be significantly degraded by the construction and continued maintenance of these paired transmission lines crossing these canyon and washes. The impacted landscape linkages, include: 1) Paige Canyon-Hot Springs Canyon, 2) Soza/Youtcy Canyon Creeks-Soza Canyon, 3) Buehman/Edgar Canyon-Redfield Canyon, 4) Alder/Stratton Washes-Kielberg Canyon, and 5) Peppersauce Wash-Whitlock Wash (AZGFD 2012, Wilbor 2014; see attached map).

These key drainage pairs (or complexes) will be seriously affected by the SunZia transmission lines bisecting them, or in worst cases by traveling parallel with them for some distance (i.e., by removal or reduction of vegetation, placement of large towers, overhead wires, cleared roadways, and new human intrusion disturbances for required on-going vegetation maintenance and by unauthorized OHV use). As a result of this project, larger mammals (see above) would find these important corridors with altered vegetation, new human infrastructure, and new human disturbance. These factors would combine to make these corridors less functional as linkages in terms of suitable habitat for their movement needs. These species would be more likely to not attempt to use them (thus not disperse/migrate) or may prompt them to take more difficult travel routes, exposing them to higher stress conditions that diminish their reproductive fitness or expose them to higher mortality risk. Other canyons would also be impacted by SunZia transmission line crossings, including: Redrock, Roble, Catalina, and Smelter. All these drainages (including the drainages mentioned above) are notable for their upslope to down basin hydrological and ecological connections, which provide

seasonal water to the river basin, nutrient transport, and facilitate wildlife connections to the San Pedro River corridor.

Large and small conservation organizations have worked for over 40 years to protect and conserve the environment of the San Pedro watershed, including the lower San Pedro watershed where the proposed SunZia transmissions line would traverse. The Nature Conservancy calls the San Pedro River one of its "Last Great Places" known for its rich riparian habitat, birds, and other wildlife. Nearly $50 million dollars as been invested by various conservation groups to protect more than 200,000 acres in the lower valley. The National Audubon Society and Tucson Audubon Society have worked together to scientifically document the lower San Pedro River corridor's importance to bird populations (2006-2015). The San Pedro valley is a principal hemispheric migration pathway and nesting area within the North America Pacific Flyway for Neotropical birds (>250 migrating bird species and >100 breeding bird species) (BLM, San Pedro RNCA website).

In 2007 the lower San Pedro was identified as an Arizona Important Bird Area (IBA), and in 2008 it was identified as a Global Important Bird Area by the National Audubon Society (NAS IBA Science Technical Committee). The upslope-downslope connection within bird populations has been documented by Audubon's bird studies in the watershed (TAS 2011). Additionally, the transmission lines would cross the San Pedro River where federally designated critical habitat for the yellow-billed cuckoo (USFWS Endangered Species Act- Threatened species) is present. Beyond the San Pedro River, SunZia would cross Buehman and Edgar Canyons, which also have high potential to support this threatened species. Local raptor species populations, particularly zone-tailed and red-tailed hawks, and golden eagles (as well as turkey vultures and ravens), which are known to use the many canyon systems of the Rincon and Catalina ranges, would have a higher potential to be impacted from transmission lines placed within their foraging range, resulting in line collisions and electrocutions, thereby increasing their overall mortality rate (Loss et al. 2014, Rollan et al. 2010).

As a conservation biologist working in the valley from 2002 up to the present, I have listened and worked with many diverse groups and individuals in the lower San Pedro valley, including the Natural Resource Conservation Districts (Redington and Winkelman), comprised primarily of ranchers and farmers, as well as met with many individual landowners. Residents of the lower San Pedro, including ranchers, farmers, small property landowners, and local community residents alike, overwhelmingly oppose the loss of landscape condition integrity that these transmission lines would bring to the lower San Pedro valley. Ranchers know they will experience impacts to their operations through fragmentation of their grazing ranges, increased erosion, introduction of invasive vegetation, and unauthorized motorized vehicle use that will follow new transmission line access and alignment roads. Environmentally concerned residents are concerned about loss of wildlife connectivity, habitat loss, direct and indirect impacts to species, increased erosion and effects on the San Pedro River, invasive species incursion (increased fire potential from new species), increased unauthorized vehicle users (who will find new routes by word of mouth and the internet), new access points that will open up previously remote backcountry leading to Sonoran desert ecosystem degradation (e.g., trash, trails, erosion, vegetation destruction), wildlife poaching, and cultural resource impacts and looting.

Of particular concern is the impact to the Conservation Land System of Pima County. Pima County has purchased, with over $14M dollars of voter approved bond money, three large ranches within the lower San Pedro valley for conservation purposes to further its Sonoran Desert Conservation Plan and meet the mitigation requirements for its Multi-Species Habitat Conservation Plan with the U.S. Fish and Wildlife Service (i.e., Six Bar, M Diamond, and A-7 ranches, total approx. 66,000 acres in conservation management). All these ranches would be ecologically compromised by the SunZia transmission lines and its corridor. Working ranch and land management operations would be impacted. Cultural resources (both archaeological and historical), which are extensive throughout the transmission line sited route, would be compromised, both at the time of construction and later through increased access roads and the potential for looting. Two of these ranches are bisected in half causing severe management impacts to the ecological values and management potential of these conservation reserves. The conservation, operation, and economic impacts to these and other valley ranches could be avoided by an alternative placement of the SunZia route outside the lower San Pedro valley if the project proceeds (see below).

The eco-tourism/outdoor recreation sector of the valley economy is just developing in this valley (and in the Aravaipa valley as well). Outdoor recreationists, pursuing many activities such as birding, biking, hiking, nature identification, photography, and wildlife watching, are beginning to find this valley a destination close to the urban centers of the Sun Corridor where many reside. The SunZia project could lessen this opportunity for small-scale, low-impact economic development for some of the economically depressed local communities in the valley, just as this sector of the valley's economy is poised to grow. The "ecosystem services" provided by an undisturbed, unfragmented, and undeveloped watershed, include: unimpeded mountain front and in-tributary groundwater recharge, nutrient transport from highlands to lowlands, natural fire cycles, clean air and water provisioning, support of high biodiversity, ecological trophic function and population regulation, livestock grazing, wildlife-based recreation, dark sky values for astronomical viewing, and desert solitude values for personal rejuvenation. These "services" would be compromised by varying extents by the routing of the SunZia project through the lower San Pedro watershed.

The need for this project at all is highly questionable, both in terms of providing renewable energy and conventional energy. The Southline Project is much better designed and sited to meet any such energy needs in southwestern New Mexico and southeastern Arizona, and a more northerly route along existing extra-high-voltage lines through Springerville to Phoenix would result in far fewer environmental impacts if delivering New Mexico's wind energy to the western grid is the objective. The Southline Project uses an existing corridor through Tucson rather than opening up an entirely new corridor in the San Pedro Watershed. The Southline project's multiple connections with the southeastern Arizona grid also make it much more utilitarian for Arizona's citizens. Co-location with existing infrastructure should be the selected placement for the SunZia lines if this project proceeds. Co-locating this project makes sense for efficiency and permitting (through fewer access and alignment road needs, and fewer cultural resource reviews and avoidance measures needed), cost (less cost for access, construction, and maintenance of infrastructure), and most importantly ecologically (less loss of the desert landscapes, less impact to riverine/wash/creek natural resources, less potential for introducing non-native species, and less disturbance to ecological systems and wildlife populations).

In sum total, SunZia transmission line siting through the lower San Pedro valley would result in damaging ecological impacts in numerous ways. It would degrade ecological systems (upland impacts transferred to lowlands), increase erosion, impact wildlife habitats, impact wildlife populations, disrupt migration linkages, compromise species climate adaptation potential (through impacting wildlife species movement), and increase greatly the potential for the introduction of non-native species such as buffelgrass, increasing wildland fire potential in the non-fire adapted Sonoran desert ecosystem. Socially, valley landowners, ranchers, farmers, tourism operators, and community residents overwhelmingly oppose the siting of this major transmission line in the undisturbed desert landscape of the San Pedro valley. Such a strong and united local sentiment needs to be respected.

The Cascabel Conservation Association strongly advocates against siting new infrastructure, whether this project or a future project, through the lower San Pedro valley. Arizona's special rural, unfragmented, and undeveloped landscapes are our most ecologically valuable places, conserving the natural resources we so highly value, and providing for the many ecosystem services that benefit us all. Places like the lower San Pedro River and its associated tributaries (the many mentioned within this letter, along with the Aravaipa Canyon area), are too important to people and nature to defile. We have a responsibility to future Arizona citizens to protect the environment and landscapes that have been essential to nature and people through time up until this 21st century, and should remain so long into the future. Please find an alternative to the SunZia Project and avoid siting *any* major infrastructure projects through this remote, sensitive, ecologically and culturally important watershed.

Sincerely,

Scott L. Wilbor, Lower San Pedro Conservation Director
Cascabel Conservation Association

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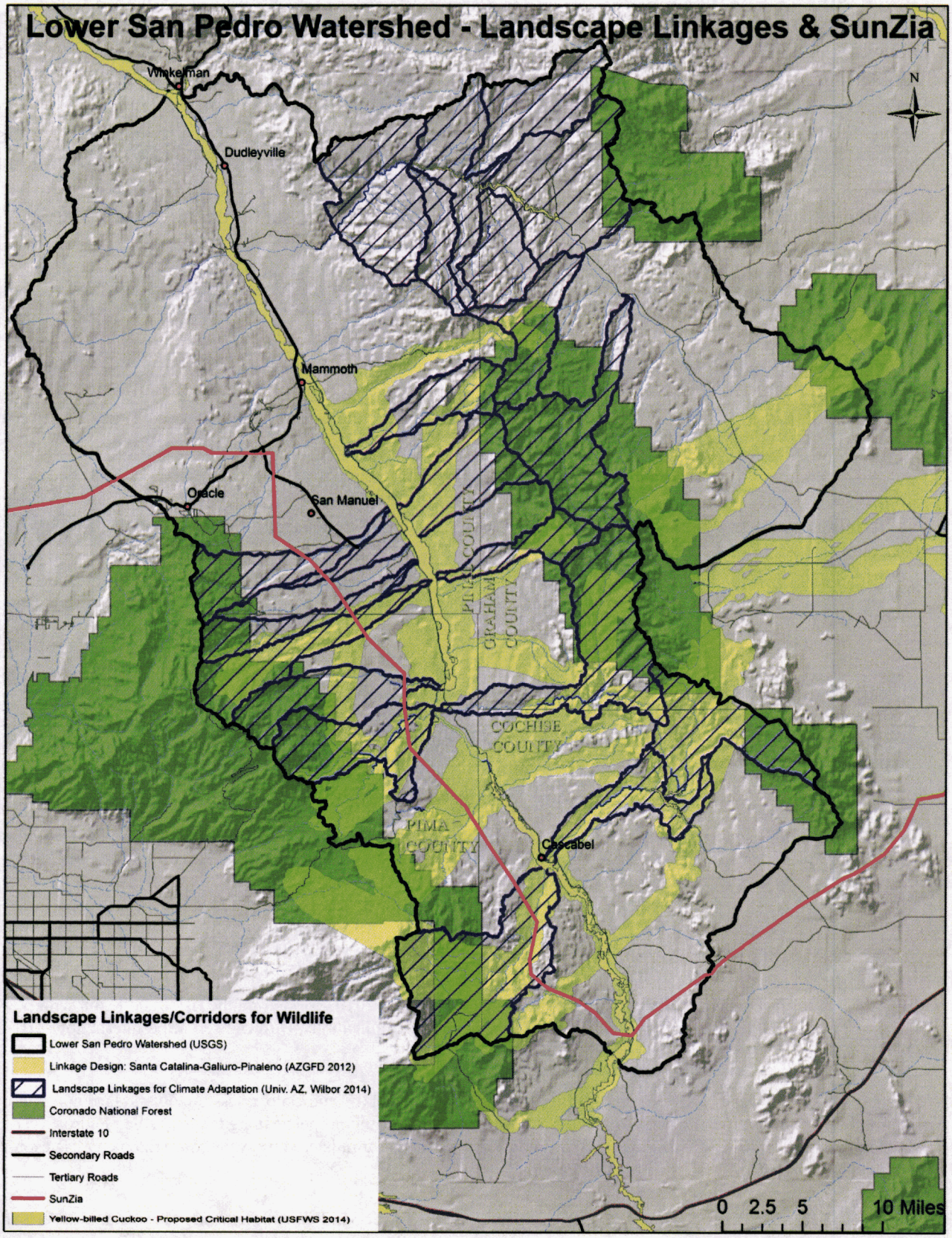
Lower San Pedro Watershed - Landscape Linkages & SunZia
Winkelman
Dudleyville
Mammoth
Oracle
San Manuel
Cascabel
PINAL COUNTY
GRAHAM COUNTY
COCHISE COUNTY
PIMA COUNTY
N
Landscape Linkages/Corridors for Wildlife
Lower San Pedro Watershed (USGS)
Linkage Design: Santa Catalina-Galiuro-Pinaleno (AZGFD 2012)
Landscape Linkages for Climate Adaptation (Univ. AZ, Wilbor 2014)
Coronado National Forest
Interstate 10
Secondary Roads
Tertiary Roads
SunZia
Yellow-billed Cuckoo - Proposed Critical Habitat (USFWS 2014)
0 2.5 5
10 Miles